

# Minimising Washing Up Liquid Bottle Waste

A Closed-Loop System

## Abstract

WARWICK  
SUSTAINABILITY  
CHALLENGE



We are proposing a **circular economy** sustainable solution.

Aiming to develop a **closed-loop system** in supplying and restocking **ecological washing up liquid**

## Background Research

Carbon emissions are generated by producing plastic packaging, and additional carbon emissions are generated **by inadequate recycling of plastic**. Given the aggressive chemicals in washing up liquid cardboard packaging wasn't an option, so we aimed to **remove it** entirely.

To contribute to the **Carbon Neutral Targets at Warwick**, we identified the problem through questionnaire research and in-person conversation and came up with feasible and practical solutions to **eliminate the use** of washing up liquid plastic bottles.

We also made sure cleaning staff were on-board with our idea as they would actively take part in it

## Objectives



Minimise the release of **highly polluting** chemicals found in traditional washing up liquid



Eliminates plastic waste and reduces **CO<sub>2</sub> footprint**



Support **local and ethical companies**.

## Survey Results



**30 Survey Respondents**



**3 in 4**

Share washing up liquid with their kitchen



**18,962**

Washing up liquid bottles used per academic year



**37,000L**

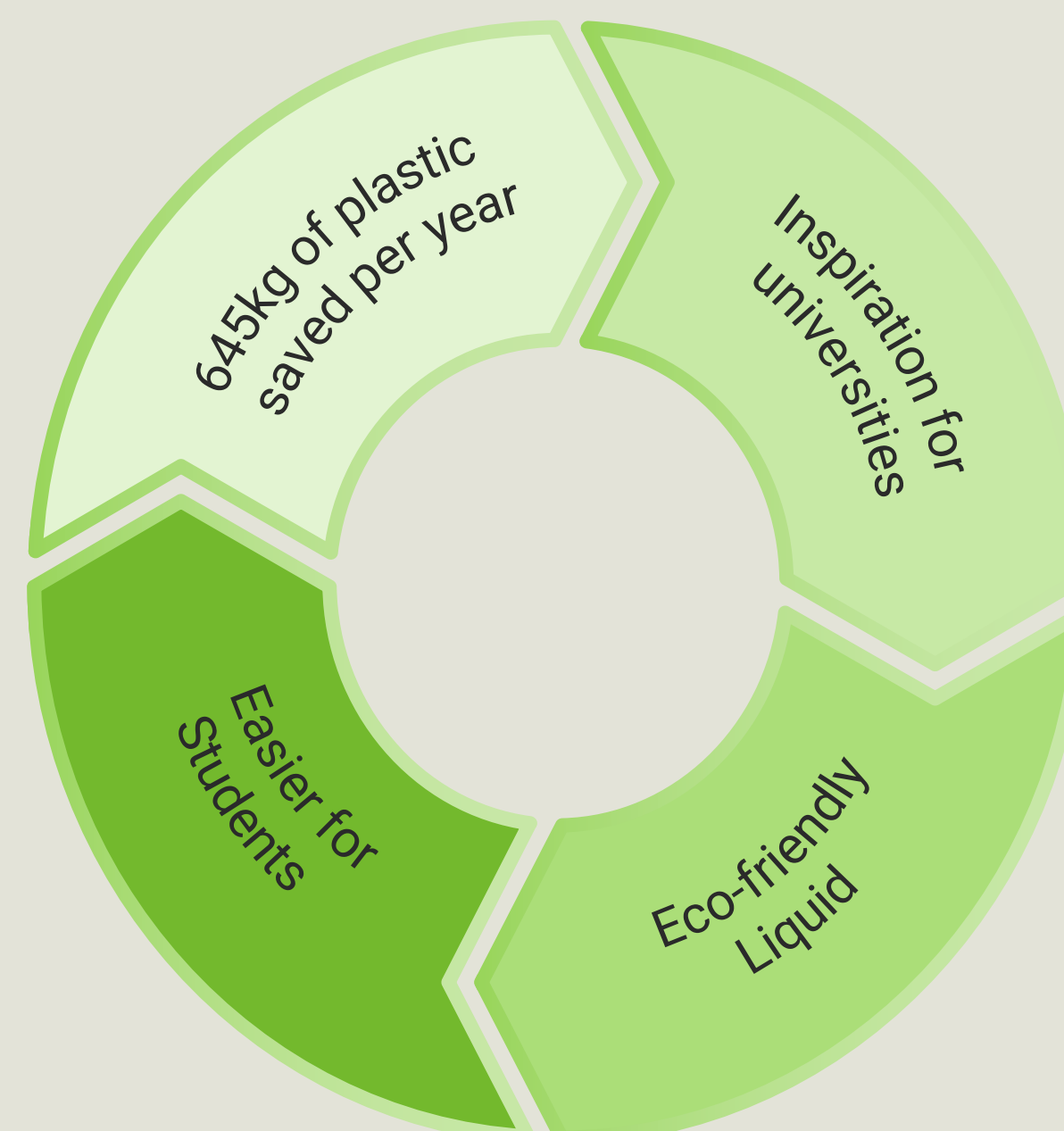
Equivalent to 37,000L of washing up liquid



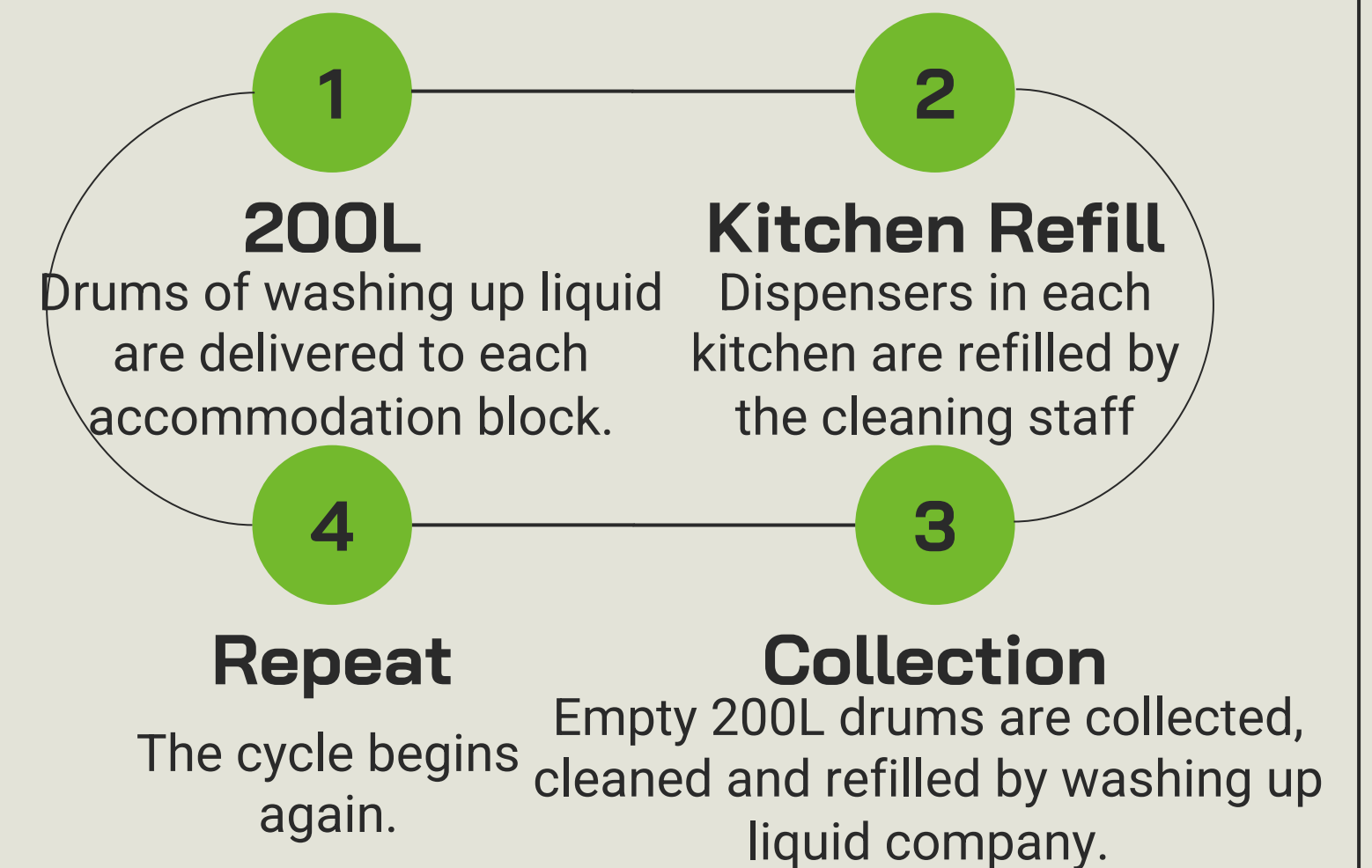
**645kg**

Of plastic saved per year

## Benefits



## Circular Methodology



## Estimated Finances

- 18,962 bottles is 37,000L of washing up liquid
- Which would require 185 drums of 200L
- £175 per 200L ≈ **£30,000 per year**

## Conclusion



At only **£4.28 per student** every year for eco-friendly liquid. Our idea is **desireable, innovative, ethical, holistic** and above all else **feasible**.

## Acknowledgements

### Team Members

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The Warwick Sustainability Challenge: Waste Project Team